

## ABSTRACT

An optical fiber ring is provided carrying a plurality of WDM optical signals, each at a respective one of a plurality of wavelengths. Each optical signal carries data associated with a corresponding group of TDM add/drop multiplexers coupled to an optical path spaced from the optical fiber ring. The optical signals are extracted from the fiber ring with optical add/drop multiplexers, and the data carried by the optical signals is then supplied to the corresponding group of TDM add/drop multiplexers. Accordingly, instead of assigning an optical add/drop multiplexer to each TDM add/drop multiplexer, the optical add/drop multiplexers are assigned to respective groups of TDM add/drop multiplexers. As a result, optical loss as well as cost of the WDM ring are minimized.